



Early Journal Content on JSTOR, Free to Anyone in the World

This article is one of nearly 500,000 scholarly works digitized and made freely available to everyone in the world by JSTOR.

Known as the Early Journal Content, this set of works include research articles, news, letters, and other writings published in more than 200 of the oldest leading academic journals. The works date from the mid-seventeenth to the early twentieth centuries.

We encourage people to read and share the Early Journal Content openly and to tell others that this resource exists. People may post this content online or redistribute in any way for non-commercial purposes.

Read more about Early Journal Content at <http://about.jstor.org/participate-jstor/individuals/early-journal-content>.

JSTOR is a digital library of academic journals, books, and primary source objects. JSTOR helps people discover, use, and build upon a wide range of content through a powerful research and teaching platform, and preserves this content for future generations. JSTOR is part of ITHAKA, a not-for-profit organization that also includes Ithaka S+R and Portico. For more information about JSTOR, please contact support@jstor.org.

THE AMERICAN NATURALIST.

Vol. IV.—APRIL, 1870.—No. 2.



THE SEA OTTERS.*

BY CAPT. C. M. SCAMMON.

THE most valuable fur-bearing animals inhabiting the waters of the north-west coast of North America are the sea otters; they are found as far south as twenty-eight degrees of north latitude, and their northern limits include the Aleutian Islands.† Although never migrating to the southern hemisphere, these peculiar amphibious animals are found around the isolated points of southern Kamtschatka and even to the western Kuriles, a chain of islands that separate the Okhotsk Sea from the north-eastern Pacific.

The length of the matured animals may average five feet including the tail, which is about ten inches; the head resembles that of the fur seal of the coast, having full, black, sharp eyes, exhibiting much intelligence. The color of the females when in season is quite black, at other periods of a dark brown. The males usually are of the same shade, although in some instances they are of a jet shining black like their mates. The fur is of a much lighter shade inside than upon the surface; and extending over all are long, black, glistening hairs, which add much to the richness and beauty of the pelage. Some individuals, about the nose and eyes,

*Furnished for publication by the SMITHSONIAN INSTITUTION.

†The most northern limit we can rely upon is sixty degrees north.

are of a light brown or dingy white. The ears are less than an inch in length, quite pointed, standing nearly erect, and are covered with short hair.

Its hind flippers, or feet, are long and webbed much like a seal's. Its forelegs are short; the fore paws resemble those of a cat, and are furnished with five sharp claws, each measuring half an inch in length; the hind feet, or flippers, are furnished likewise.

Occasionally the young are of a deep brown, with the ends of the longest hairs tipped with white, and about the nose and eyes of a cream color.

The mating season of the sea otter is not known, as the young are met with in all months of the year; hence it is reasonable to suppose they differ from most other species of marine mammalia in this respect.*

The hunters about Point Granville say that the males are less shy, and run more in shore during May and June, and appear to be in search of the females; while on the other hand, the latter make every effort to avoid them. The time of gestation is supposed to be eight or nine months.

The oldest and most observing hunters about Point Granville aver that the *sea otter is never seen on shore unless it is wounded*. (Nevertheless we have accounts of their coming on shore upon the Aleutian Islands, which will be spoken of hereafter.)

It is possessed of much sagacity, has great powers of scent, and is exceedingly imbued with curiosity.

Its home is nearly as much in the water as some species of whales; and as whalers have their favorite "cruising grounds, so likewise do the otter hunters have their favorite *hunting grounds*, or points where the objects of pursuit are found in greater numbers than along the general stretch of the coast. About the seaboard of Upper and Lower California, Cerros St. Gerimmo, Guadalupe, St. Nicholas and

*This remark in relation to finding the young at all seasons of the year is based upon observations made at Point Granville.

St. Miguel Islands, have been regarded as choice places to pursue them; farther northward, off Cape Blanco on the Oregon coast, and Point Granville and Gray's Harbor, along the coast of Washington Territory. At the present day considerable numbers are taken by whites and Indians about these northern grounds.

Thence to the northward and westward comes a broken coast and groups of islands where the animals were in former days hunted by the employees of the Hudson Bay Company, Russian American Company, and the natives inhabiting those broken shores.

These interesting animals are gregarious, and frequently may be seen in bands numbering from fifty up to hundreds. When in rapid movement they make alternate, undulating leaps out of the water, plunging again as do seals and porpoises. When in a state of quietude they are much of the time on their backs. They are frequently seen in this posture with the hind flippers extended as if catching the breeze to sail or drift before it. They live on clams, as well as crabs and other species of crustacea; sometimes small fish. When the otter descends and brings up any article of food, it instantly resumes its habitual attitude on the back to devour it. In sunny days, when looking, it sometimes shades its eyes with one forepaw, much in the same manner as a person does with the hand.

The females usually have but a single young one at a birth, never more than two, which are brought forth on the kelp (say the white hunters), which abounds at nearly all points known as their favorite resorting places.*

*That the otters have their young in the water, or on the kelp, appears improbable; however, may it not be possible? We have it from pretty reliable authority that they do come on the beaches about the Aleutian Islands. Is it probable that the habits of the animals change in this respect in different latitudes?

By expressing doubts as above, no reflection is cast on the hunters with whom I have conversed; on the contrary, those men who have kindly furnished me with much valuable data, I know to be of undoubted veracity, and they seem positive that "sea otters never come on shore unless in some way disabled." This is the belief of Mr. Blodget, a very successful hunter at Point Granville. He assures me that he has searched dili-

The mothers caress and suckle their offspring seemingly with much affection, fondling them with their forepaws, reclining in their usual manner, and frequently uttering a plaintive strain, which may have given rise to the saying that "sea otters sing to quiet their young ones." But when startled they rise perpendicularly nearly half their lengths out of the water; and if their quick, sharp eyes, discover aught to cause alarm, the cubs are seized with the mouth, and instantly all will disappear under water. Both males and females are sometimes seen curled up in such shapelessness as to present no appearance of animal form; when in this position they are said to be sleeping. The perpendicular attitude is likewise often adopted during the mating season.

The sea otter is rarely seen far from land, its home being in the thick beds of kelp near the shore, or about outlaying rocky reefs.

Point Granville seems to be an exception, as there is no

gently for their tracks along the sandy beach lying between the above-named point and Gray's Harbor, but never found the least indication of them.

Captain Williams, who has long been a successful sea otter hunter on the California coast, corroborates Mr. Blodget's statement as to sea otters coming on shore on that coast.

Coxe, in his work published in 1780, writes the following in relation to the sea otter: "Of all these furs, the skins of the sea otter are the richest and most valuable. Those animals resort in great numbers to the Aleutian and Fox Islands; they are called by the Russians '*Bosbry Morfki*, or sea beavers, and sometimes Kamtchadal beavers, on account of the resemblance of their fur to that of the common beaver. From these circumstances several authors have been led into a mistake, and have supposed that this animal is of the beaver species, whereas it is the true sea otter.

The females are called *Matka*, or dams; and the cubs, till five months old, *Medviedki*, or little bears, because their coat resembles that of a bear; they lose that coat after five months, and then are called *Kofchloki*.

The fur of the finest sort is thick and long, of a dark color, and fine glossy hue. *They are taken four ways;—struck with darts as they are sleeping on their backs in the sea, followed in boats and hunted down till they are tired, surprised in caverns, and taken in nets.*

Their skins fetch different prices according to their quality.

At Kamtschatka, the best sell for, per skin, from thirty to forty roubles; middle sort, twenty to thirty; worst sort, fifteen to twenty-five. At Kiachta, the old and middle-aged sea otter skins, are sold to the Chinese per skin, from eighty to one hundred; the worst sort from thirty to forty.

As these furs fetch so great a price to the Chinese, they are seldom brought into Russia for sale; and several, which have been carried to Moscow, as a tribute, were purchased for thirty roubles per skin; and sent from thence to the Chinese frontiers, where they were disposed of at a very high interest."

kelp in sight from the shore, but the *Indians* say that there is kelp in large patches about ten miles seaward, where the animals resort as a breeding place.*

About the period of the establishing of Fort Astoria, near the mouth of the Columbia, and for many years following, the sea otter hunters, along the coasts of California and Oregon, were made up from nearly all the maritime nations of Europe and America, as well as from among the different tribes of natives that dwelt near the seashore. Those of the former were hardy spirits, who preferred a wild life and adventurous pursuits, rather than civilized employment. The distance coasted in their lightly constructed boats, the stealthy search for the game, and when discovered, the sharpshooting pursuit, gave these hunting expeditions a pleasant tinge of venture; moreover, the taking of sea otters on the coasts of the Californias by foreigners, was prohibited by the Mexican government; and the hunters were aware that, if detected, the penalty would be severe; hence they ever kept a watchful eye on all vessels seen, which were carefully avoided, or cautiously approached.

An "otter canoe" is fifteen feet long, nearly five wide, and eighteen inches deep. It is sharp at both ends, with flaring sides, and but little shear. Still these boats are admirable sea-goers, and regarded as unsurpassed for landing through the surf. Its shape is peculiar; so likewise are the paddles for propelling it, which are short with very broad blades, being better adapted for use in the thick beds of kelp.

The outfit when going on a cruise is limited nearly to the barest necessities. Two men usually hunt in one boat, each taking his favorite rifle, with a supply of ammunition. A little tea, coffee, sugar, flour, or ship-bread, are provided, adding pipes and tobacco, and, as a great luxury, perhaps a keg of spirits completes their equipment.

All being in readiness, they leave the quiet waters of the

*Within the last four years I have passed frequently over this locality assigned by the *Indians* as producing thick beds of kelp, but have never found any. — C. M. S.

harbor and put to sea, following the trend of the land, but occasionally making a broad deviation to hunt about some island, miles from the main.

When an otter is seen within rifle-shot instantly the hunter fires, and if only wounded the animal dives under water but soon reappears to be repeatedly shot at till captured. Sometimes three boats will hunt together; then they take positions one on each side, but in advance of the third, and all three in the rear of where the animal is expected to be seen. It is only the practised eye of experienced men that can detect the tip of the animal's nose peering above water disguised by a leaf of kelp.

Thus they cruise in search of the game landing to pass the nights, at different places well known to them, behind some point or rock that breaks the ocean swell. The *landings* are "*made*" by watching the successive rollers as they undulate upon the beach, and when a favorable time comes the boat with dexterous management glides over the surf with safety to the shore. It is then hauled up clear of the water and turned partially over for a shelter; or a tent is pitched, a fire is made of drift wood, or if this fail, the dry stalks of the cactus, or a bunch of dead chapperel serves them; the evening meal is soon partaken of with hearty relish; then come the pipes, which are enjoyed intensely. Freed from all care these hardy men talk of past adventures and frolics, and when inclined roll themselves in their blankets for a night's invigorating sleep in the open air; awaking at day-break to the screams of sea-birds and the barking of coyotes attracted by the scent of the encampment.

The morning repast over they again embark in their cockle-shell boats, launch through the surf, gain the open sea, and paddle along shore, ever on the watch for "otter sign."

From San Francisco northward as far as Juan de Fuca Strait, the hunting is chiefly prosecuted by shooting them from the shore, the most noted grounds being between

Gray's Harbor and Point Granville, a belt of low coast lying between the parallels of 46° and 48° north latitude.

The white hunter builds his two log cabins, one near the southern limits of his *beat* and the other at its northern terminus near Point Granville. During the prevalence of southerly winter gales he takes up his quarters at the last named station, as the game is found there more frequently; but when the summer winds sweep down from the north he changes his habitation and pursues the animals about the breakers of Gray's Harbor. From early dawn, till the sun sinks below the horizon, the hunter with rifle in hand and ammunition slung across his shoulder,* walks the beach on the lookout for a shot; the instant one is seen, crack goes the rifle, but it is seldom that the animal is secured by one fire. A sea otter's head bobbing about in the restless swell is a very uncertain mark; and if instantly killed the receding tide or adverse wind might drift the animal seaward, so that even if it eventually drifts to shore it may be far out of sight from the hunter by day, or is thrown on the rocks by the surge during the night, and is picked up by some one of the strolling Indians, who "run the beach" in quest of any dead seal, or otter, that may come in their way.

It is estimated that the best shooters average at least twenty-five shots to every otter killed; and only about one-half the number shot are secured by the rightful owners. But when once in his possession, it is quickly fleeced of its valuable skin, and stretched on the wall of the cabin to dry.

It is no unusual occurrence for the hunter to pass a week travelling up and down the beach, and he may shoot sixty or more rounds, perhaps kill several, but owing to *bad luck*, not one is secured, all either drifting to sea, or to shore, possibly

*I am informed by Mr. Ford, a resident near the hunting grounds, that the hunters now use a kind of a ladder, or it might be termed two ladders joined near the upper ends by a hinge, opening at the lower ends. It is made of very light material and can be easily carried by hand; when required for use it is opened and placed on the beach and mounted by the hunter when an elevation is desired, which is considered a great advantage under some circumstances.

with the flowing night-tide; and the object so eagerly and patiently sought for is at last stealthily appropriated by some skulking savage.

Notwithstanding their propensity to purloin, the Indians of the north-west coast not only occasionally shoot the sea otter as do the whites, but in the months of July and August, when calm weather prevails, they capture them by night. A small canoe is chosen for the purpose and the implement used is a spear of native make composed of bone and steel, fitted to a long pole by a socket. Four chosen men make the crew for the canoe.

Near the close of the day a sharp watch is kept on any *band* of the animals that may have been in view from the shore and their position accurately defined before beginning the pursuit. All being in readiness, as the shade of evening approaches, they launch upon the calm sea, and three men paddle in silence toward the place where the objects of pursuits were seen, while the fourth takes his station in the bow—who is either a chief or some one distinguished in the chase—watches intently for the sleeping otters. As soon as one is descried the canoe is headed for it, and when within reach the spear is launched into the unwary creature, which, in its efforts to escape, draws the spear from the pole, but is not freed yet (as there is a small strong line connecting the spear and pole together, although permitting them to separate a few feet). It dives deep, but with great effort, as the unwieldy pole greatly retards its progress. The keen-eyed savage, however, traces its course in the blinding darkness by the phosphorescent light caused by the animal's transit through the water, and when it rises upon the surface to breathe is beat with clubs, paddles, or, perhaps another spear, and is finally despatched after repeated blows or thrusts. The conflict arouses the whole band which instantly disappear, so that it is seldom that more than one is secured.

As soon as the hunt is over the animal is brought on shore, the skin taken off and stretched to dry, and when

ready for market the lucky owner considers himself enriched to the value of ten or fifteen blankets. The flesh of the otter is eagerly devoured by the Indians as a choice article of food. The mode of capture between Point Granville and the Aleutian Islands varies with the different native tribes inhabiting that coast.

About the Aleutian Islands, the natives, dressed in their water-proof garments made from the intestines of seals, wedge themselves into their *bidarkas* (which are constructed with a light wooden frame, and covered with walrus or seal skins*), and as it were plunge through the surf that dashes high among the crags, and with almost instinctive skill reach the less turbulent ground swell that heaves in every direction.

Once clear of the rocks, however, the hunters watch intently for the otters. The first man that gets near to one darts his spear, then throws up his paddle by way of signal; all the other boats form a circle around him at some distance; the wounded animal dives deeply, but soon returns to the surface near some one of the boats forming the circle; again the hunter that is near enough hurls his spear and elevates his paddle, and again the ring is formed as before. In this wise the chase is continued till the capture is made. As soon as the animal is brought on shore the two oldest hunters examine it, and the one whose spear is found nearest its head is entitled to the prize. The number of sea otters taken annually is not definitely known, but from the most authentic information we can obtain the aggregate is two thousand six hundred; valuing the skins at fifty dollars each, amounts to the sum of one hundred and thirty thousand dollars.

Whether these most valuable fur animals have decreased in numbers within the few past years is questionable. The hunting of them on the coast of California is no longer

*These "bidarkas, or skin-boats," are from twelve to eighteen feet long, according as they may be made for one or two persons, the greatest width being about thirty inches, and depth seventeen inches. In these frail crafts the natives go from Onilaski to Sanak Islands to hunt the sea otter, a distance of one hundred and sixty miles.

profitable for more than two or three hunters, and we believe of late, some seasons have passed without any one engaging in the enterprise; notwithstanding off Point Granville, which is an old hunting ground, sixty otters were taken by only three hunters during the summer of 1868, a great annual increase over many past years.

It is said that the Russian American Company restricted the number taken yearly by the Aleutian Islanders—from whom the chief supply was obtained—in order to perpetuate the stock. Furthermore may it not be that these sagacious animals have fled from those places on the coasts of the Californias, where they were so constantly pursued, to some more isolated haunt, and now remain unmolested.

FALCONRY.

BY WILLAM WOOD, M.D.

As Falconry, before the discovery of gunpowder and firearms, was a favorite amusement of the kings and nobles all over Europe, and as it is even to the present day among the Turks in some parts of Asia Minor; among the Persians, the Circassians, the wandering hordes of Tartars and Turcomans, and as it forms one of the chief sports of some of the native princes of India, and is not unknown in the northern provinces of China, and among several other barbarous or half-civilized countries, it may not be uninteresting to my readers to know in what estimation it has been held. I will not in this article give any account of the manner of training falcons; suffice it to say that they were taught to fly at the game and capture it, and come at call. It required months, and sometimes years, to train them properly.

Hawking was not unknown to the Romans in the early